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PATENT

#6  
LQJ  
9-1891

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Cook et al.

Serial No.: 566,977

Art Unit: 184

Filed: August 13, 1990

Examiner: D. Crouch

For: Sugar Modified Oligonucleotides That  
Detect And Modulate Gene Expression

Commissioner of Patents & Trademarks  
Washington, DC 20231

Sir:

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. §1.99**

Pursuant to the duty of disclosure set forth in 37 C.F.R. § 1.56, Applicant would like to bring to the attention of the Patent and Trademark Office the following additional publications which may be helpful in the examination of the above-identified patent application. All published documents are listed on the attached copy of Form PTO-1449, and a copy of each document is enclosed for the convenience of the Examiner.

U.S. Patent No. 4,689,320 (Kaji et al.) describes modes of administration of anti-viral oligonucleotides, for example, injections and suppositories. Mice infected with HSV-1 were injected intraperitoneally. Corneas of mice infected with HSV-1 were treated by drops containing oligonucleotide.

Zon et al., "Oligonucleotide Analogues as Potential

Chemotherapy Agents", *Pharmaceutical Research*, 5(9):539-549  
(1988) disclose oligonucleotide-mediated protein inhibition using  
oligonucleoside methylphosphonates.

The invention set forth in the above-referenced  
application is believed to be patentable over the foregoing cited  
documents.

Respectfully submitted,

Date: September 5, 1991

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